

**Seventh Special Issue on Linear Algebra and Statistics**

R.W. Farebrother, S. Puntanen, G.P.H. Styan and H.J. Werner	
Preface . . . . .	1
S.E. Ahmed and B. Ullah	
Improved biased estimation in an ANOVA model. . . . .	3
B.F. Arnold and P. Stahlecker	
Minimax adjustment technique and fuzzy information . . . . .	25
R.P. Barry and R.K. Pace	
Monte Carlo estimates of the log determinant of large sparse matrices	41
J.S. Chipman	
Linear restrictions, rank reduction, and biased estimation in linear regression . . . . .	55
A.W. Davis	
Spherical functions on the Grassmann manifold and generalized Jacobi polynomials - Part 1 . . . . .	75
A.W. Davis	
Spherical functions on the Grassmann manifold and generalized Jacobi polynomials - Part 2 . . . . .	95
R.W. Farebrother	
A class of statistical estimators related to principal components . . .	121
J. Groß	
Solution to a rank equation . . . . .	127
J. Groß	
Explicit solutions to the matrix inverse problem $AX = B$ . . . . .	131
J. Groß	
Idempotency of the Hermitian part of a complex matrix . . . . .	135
J. Groß	
On the product of orthogonal projectors . . . . .	141
J. Groß	
A note on the rank-subtractivity ordering . . . . .	151
J. Groß, J. Hauke and A. Markiewicz	
Partial orderings, preorderings, and the polar decomposition of matrices . . . . .	161
J. Groß, G. Trenkler and S.-O. Troschke	
On semi-orthogonality and a special class of matrices . . . . .	169

*Table of Contents continued*

A.S. Hadi and H. Nyquist	
Frechet distance as a tool for diagnosing multivariate data . . . . .	183
D.A. Harville	
Use of the Gibbs sampler to invert large, possibly sparse, positive definite matrices . . . . .	203
S.R. Jammalamadaka and D. Sengupta	
Changes in the general linear model: A unified approach . . . . .	225
A. Kovačec	
The Marcus-de Oliveira conjecture, bilinear forms, and cones . . .	243
W.P. Krijnen	
A note on the parameter set for factor analysis models . . . . .	261
S. Liu	
Matrix results on the Khatri-Rao and Tracy-Singh products . . .	267
A. Markiewicz	
Simultaneous polar decomposition of rectangular complex matrices . . . . .	279
B. Schaffrin	
Softly unbiased estimation, Part 1: The Gauss-Markov model . .	285
Y. Takane and H. Yanai	
On oblique projectors . . . . .	297
J.M.F. ten Berge, W.P. Krijnen, T. Wansbeek and A. Shapiro	
Some new results on correlation-preserving factor scores prediction methods . . . . .	311
P.-C.G. Vassiliou and M.A. Symeonaki	
The perturbed nonhomogeneous Markov system . . . . .	319
S.-G. Wang, E.P. Liski and T. Nummi	
Two-way selection of covariables in multivariate growth curve models . . . . .	333
Author index to volume 289 . . . . .	343

